## Made for the UK

Comacchio introduces the MC 13-F, the latest model in its F-Line series of drilling rigs for the mini-piling sector, which was developed specifically for the UK market

The MC 13-F has already been used on two contracts in Godalming and Norwich he F-line rigs – where F stands for 'flight augers' – are designed for the installation of mini piles using solid stem and continuous flight augers (CFAs). The first model of this series, the MC 6-F, was introduced to the UK market in 2016, with the first unit supplied to foundation engineer Roger Bullivant.

With the addition of the MC



13-F, the F-Line has been expanded to handle greater diameters and drilling depths to meet the needs of customers working with vertical auger piles with up to 600mm diameter.

"Together with Comacchio, we have invested a lot of time and resources in the creation of this F-line of rigs that are designed for the UK market. We are confident that with these rigs we'll be able to better meet the needs of our clients working in the foundation sector," says Neil England, the F-Line specialist at JKS Boyles.

## **RIG FEATURES**

The MC 13-F is powered by a new-generation Deutz TCD 6.1

L06-4V engine, delivering 160kW (214hp) at 2,200rpm and complying with the latest EU Stage IV/US EPA Tier 4 Final emission standards. The exhaust gas treatment is provided by a combined DPF and SCR system. The hydraulic system of the machine, featuring a double variable displacement pump with load-sensing control and a double gear pump, is designed to grant the best possible power exploitation and reduced fuel consumption.

Attention was paid to the design of the mast. The robust 19.5t mast has a modular structure, allowing for a feed stroke ranging from 3,100mm to 8,600mm. The rig can thus be operated both in low-headroom and in open-site



conditions. The 8,600mm feed stroke version can be equipped with a 2.5m auger kelly extension, allowing the machine to drill up to 11m deep without adding additional auger sections. The mast design was simplified to raise from its near horizontal transport position to vertical and has a 5° or 15° (depending on mast length) side slew offering maximum performance for vertical drilling. The mast is equipped with new hydraulic casing clamps that were developed to allow the use of 660mm casings or 600mm-diameter augers.

To meet the requirements of CFA pile drilling, the MC 13-F is equipped with a 'heavy-duty' rotary head delivering up to 5,500daNm torque and featuring a 4in (102mm) bore and concrete swivel. The machine can be supplied with alternative rotary heads for open-hole rotary and rotary-percussive drilling methods, including high-efficiency, large-diameter down-the-hole (DTH) hammers with up to 600mm diameter.

The machine can be supplied with proportional servo-assisted controls or with the Comacchio proprietary radio control system, which allows one person to manage all the machine functions, including tracking, set-up and drilling, through one console.

The MC 13-F complies with the European safety standard EN 16228. Its safety features include an interlocking safety guard surrounding the danger area, ROM operating mode that controls the feeding and rotation movements when auger sections are added or removed from the rig, and an operating mode that allows the rig to be operated without the safety guard and using hold-to-run controls if special circumstances require it (for example, while drilling in a 'front-of-the-wall' position).

The rig can also be equipped with a data logger system for the display and control of the project parameters.

"The MC 13-F is available for

rent through our rental company Rig Services Ltd. The MC 13-F has been on hire with PPS, Profesional Plant Services, who rented the rig for their client Abbey Pynford Ltd. The MC 13-F has been used on two contracts in Godalming and Norwich. Abbey Pynford drilled 200 piles all to a depth of 11m," says England.

The clients, reported JKS Boyles, were particularly satisfied

with the high productivity that could be reached thanks to the 11m one-pass drilling depth.

"More MC 6-Fs and MC 13-Fs are expected to go into operation over the next few months, and Comacchio is currently constructing a new MC 9-F, which will be a further development to the F-Line, a 10t class drill rig that sits between the MC 6-F and MC 13-F," he adds. •

